M 6.3, 3 km ESE of Calatagan, Philippines

PAGER
Version 6

Origin Time: 2020-12-24 23:43:41 UTC (Fri 07:43:41 local)
Location: 13.8196° N 120.6592° E Depth: 109.0 km
FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Created: 1 week, 2 days after earthquake

Estimated Fatalities

65% · 30% · 4%

1 10 100 1,000 10,000 100,000
Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

65% · 30% · 4%

1 10 100 1,000 10,000 100,000
USD (Millions)
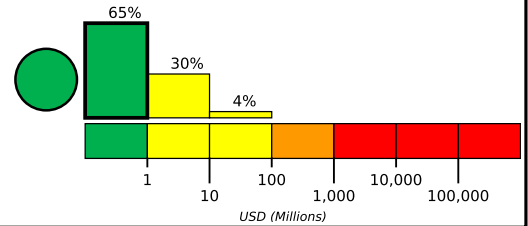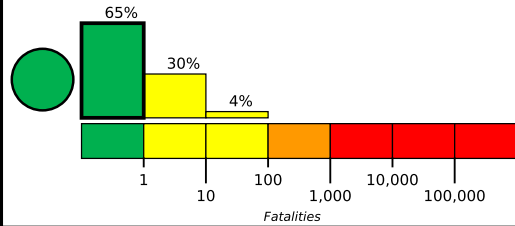
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	14,183k*	40,515k	2,848k	7k	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

0 5 50 100 500 1000 5000 10000
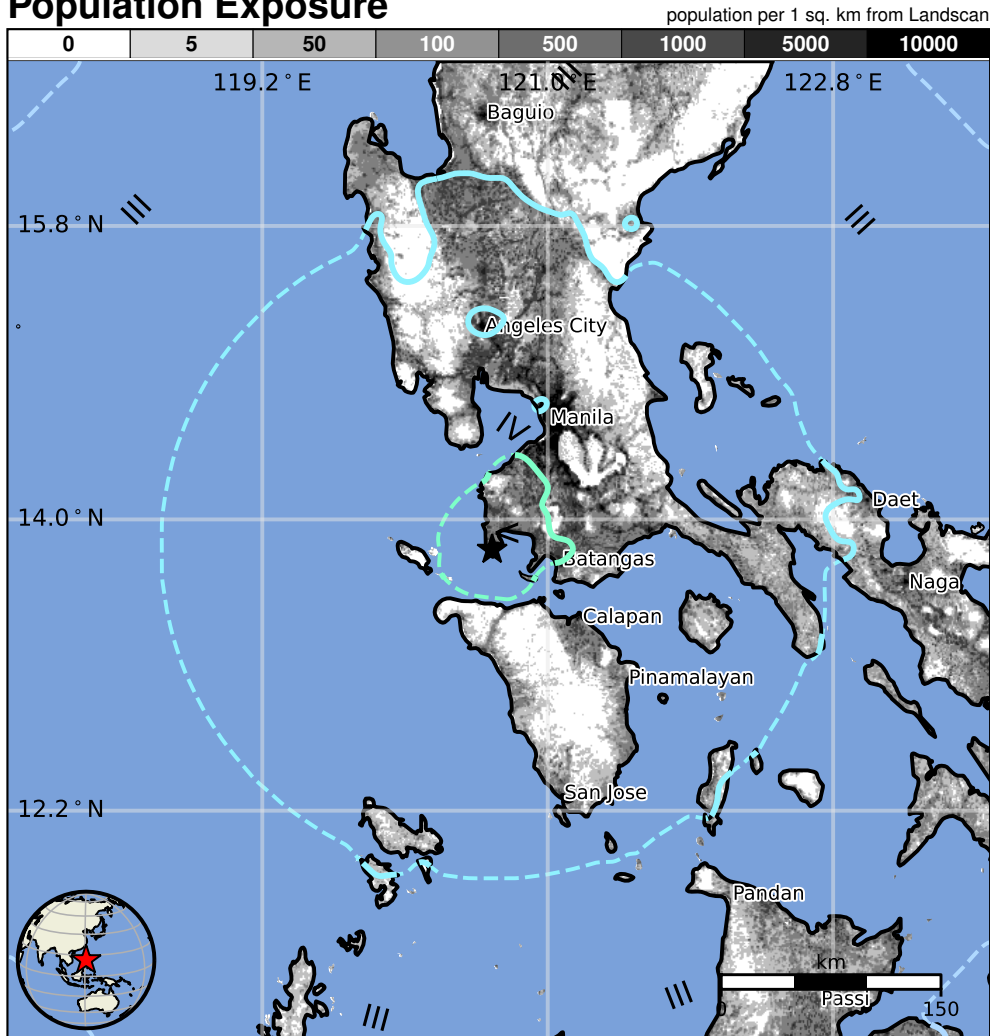
Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1977-03-18	368	7.2	VII(520k)	1
1999-12-11	236	7.2	VIII(17k)	1
1990-07-16	218	7.7	IX(893k)	2k

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
VI	Calatagan	16k
V	Balitoc	3k
V	Sabang	3k
V	Gulod	3k
V	Lucsuhin	4k
V	Biga	3k
IV	Calamba	317k
IV	**Manila**	**1,600k**
IV	San Fernando	251k
III	**Baguio**	**273k**
III	San Fernando	83k

bold cities appear on map.   (k = x1000)

Event ID: us6000d2ra